

a multiple layer, chemical barrier material having a first side and a second side; and

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a durability barrier layer coated on at least one of said first or second side comprising a thermoplastic polyolefin elastomer (TPO) with an inherent bonding affinity to the chemical barrier material, the coated chemical barrier composite achieving at least 25% improvement in ASTM 1342 puncture resistance and at least 25% improvement in modified ISO 7854 Method B flex-crack resistance of the fabric when compared to a fabric not having said durability barrier layer.

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Claim 2 (Twice Amended). The composite chemical barrier fabric of claim 1, wherein the multiple layer chemical barrier material contains at least one stratum that comprises a material selected from the group consisting of polyvinylidene chloride, ethylene vinyl acetate, ethylene vinyl alcohol, nylon, polyvinyl alcohol, polyester, polytetrafluoroethylene, fluorinated ethylene propylene, polyvinylidene chloride copolymer, acrylic, acrylonitrile copolymer, ionomers, ethylene/methacrylate acid copolymer, polybutylene, metalized polyester, polypropylene, oriented polypropylene, and polyamide.

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Claim 13 (Four Times Amended). A composite chemical barrier fabric having improved durability, comprising:

a multiple layer, chemical barrier material having a first side and a second side; and

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a durability barrier layer coated on at least one of said first or second side comprising a layer of a thermoplastic polyolefin elastomer (TPO) having an inherent bonding affinity to the chemical barrier material, the resin having an ASTM D1238 melt flow rate 230/2.16g/10 min of

4B H2  
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about 0.45; an ASTM D793 density at 23 degrees Celsius g/cm<sup>3</sup> of about 0.88; and an ASTM D1693 environmental stress-cracking resistance, hours of about >3,000.

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Claim 18 (Twice Amended). The composite chemical barrier fabric of claim 13, wherein the multiple layer chemical barrier material contains at least one stratum that comprises a material selected from the group consisting of polyvinylidene chloride, ethylene vinyl acetate, ethylene vinyl alcohol, nylon, polyvinyl alcohol, polyester, polytetrafluoroethylene, fluorinated ethylene propylene, polyvinylidene chloride copolymer, acrylic, acrylonitrile copolymer, ionomers, ethylene/methacrylate acid copolymer, polybutylene, metalized polyester, polypropylene, oriented polypropylene, and polyamide.

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Claim 30 (Twice Amended). A composite chemical barrier fabric having improved durability comprising:

a multiple layer, chemical barrier material having a first side and a second side; and

a durability barrier layer coated on at least one of said first or second side comprising a thermoplastic polyolefin elastomer resin (TPO) having an inherent bonding affinity to the chemical barrier material, the resin having an ASTM D1238 melt flow rate 230/2.16g/10 min of about 0.45.

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Claim 31 (Amended). The composite chemical barrier fabric of claim 30, wherein the multiple layer chemical barrier material contains at least one stratum that comprises a material selected from the group consisting of polyvinylidene chloride, ethylene vinyl acetate, ethylene

Fb vinyl alcohol, nylon, polyvinyl alcohol, polyester, polytetrafluoroethylene, fluorinated ethylene propylene, polyvinylidene chloride copolymer, acrylic, acrylonitrile copolymer, ionomers, ethylene/methacrylate acid copolymer, polybutylene, metalized polyester, polypropylene, oriented polypropylene, and polyamide.

Claim 37 (Four Times Amended). A composite chemical barrier fabric having improved durability, comprising:

a multiple layer, chemical barrier material having a first side and a second side; and

7 a durability barrier layer coated on at least one of said first or second side comprising a layer of a thermoplastic polyolefin elastomer resin (TPO) having an inherent bonding affinity to the chemical barrier material, the resin having an ASTM D793 density at 23°C g/cm<sup>3</sup> of about 0.88.

Claim 38 (Amended). The composite chemical barrier fabric of claim 37, wherein the multiple layer chemical barrier material contains at least one stratum that comprises a material selected from the group consisting of polyvinylidene chloride, ethylene vinyl acetate, ethylene vinyl alcohol, nylon, polyvinyl alcohol, polyester, polytetrafluoroethylene, fluorinated ethylene propylene, polyvinylidene chloride copolymer, acrylic, acrylonitrile copolymer, ionomers, ethylene/methacrylate acid copolymer, polybutylene, metalized polyester, polypropylene, oriented polypropylene, and polyamide.